

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A Rotor assembly for an electrical machine, comprising:
a rotor body of substantially cylindrical shape having an outer surface facing an gap between the rotor assembly and a stator of the electrical machine, and
a plurality of permanent magnets embedded in said rotor body,
wherein the outer surface of the rotor body defines a plurality of grooves ~~at least one groove~~ for manipulating the distribution of magnetic flux of said permanent magnets,
wherein said plurality of grooves are each at irregular angular intervals from each other.
2. (Previously Presented) The rotor assembly according to claim 1, wherein the embedded magnets extend substantially radially through said rotor body.
3. (Currently Amended) The rotor assembly according to claim 1, wherein ~~said~~ at least one of said plurality of grooves ~~at least one groove~~ axially extends along the outer surface of the rotor body.
4. (Previously Presented) The rotor assembly according to claim 1, wherein the rotor body further comprises a plurality of cylindrical laminations (10).
5. (Cancelled.)
6. (Currently Amended) A Stator assembly for an electrical machine, comprising:
a stator body of having stator poles (42), said stator poles (42) having end faces facing an air-gap between the stator assembly and a rotor of the electrical machine,
wherein a plurality of grooves ~~at least one groove~~ (40) are ~~are~~ [[is]] formed in said end

faces of said stator poles (42), and wherein the plurality of grooves are each at irregular angular intervals from each other.

7. (Currently Amended) The Stator assembly according to claim 6, wherein [[the]] at least one of the plurality of grooves ~~groove (40)~~ is skewed.

8. (Previously Presented) The Stator assembly according to claim 6, wherein the stator body further comprises a plurality of laminated sheets (30), each sheet including a yoke section (32) and stator pole sections (34).

9.-11. (Cancelled.)

12. (Currently Amended) The rotor assembly according to claim 1, wherein said plurality of grooves ~~groove~~ are [[is]] disposed about an end face of at least one of said permanent magnets.

13. (Previously Presented) The rotor assembly according to claim 4, wherein each lamination includes at least one notch (20) on a surface thereof.

14. (Previously Presented) The rotor assembly according to claim 13, wherein a plurality of laminations each including at least one notch are arranged on the rotor body to form at least one of said plurality of grooves ~~a groove~~ (20).

15. (Currently Amended) The rotor assembly according to claim 14, wherein said at least one of said plurality of grooves ~~groove (20)~~ is axially aligned with an axis of the rotor.

16. (Currently Amended) The rotor assembly according to claim 14, wherein said at least one of said plurality of grooves ~~groove (20)~~ is not axially aligned with an axis of the rotor.

17. (Currently Amended) The rotor assembly according to claim 14, wherein said at least one of said plurality of grooves ~~groove (20)~~ is skewed with respect to an axis of the rotor.

18. (Currently amended) The Stator assembly according to claim 6, wherein the at least one of said plurality of grooves ~~groove~~ extends along the length of said end faces (42) about the axial direction of the stator body.

19. (Previously Presented) The Stator assembly according to claim 8, wherein the end face of at least one pole section defines a notch (36).

20. (Previously Presented) The Stator assembly according to claim 19, wherein said laminated sheets (30) are arranged such that the at least one groove (40) extends along an axial length of the stator assembly.

21. (Previously Presented) The Stator assembly according to claim 19, wherein said at least one groove (40) extending along the axial length of the stator assembly is skewed.

22. (Previously Presented) The Stator assembly according to claim 6, further comprising a rotor.

23. (Previously Presented) The Rotor assembly according to claim 1, further comprising a stator.

24. (Currently Amended) An electrical machine comprising a substantially cylindrical stator 118 concentrically aligned with a rotor 116, the outer surface of the rotor 116 and the inner surface of the stator 118 defining a substantially cylindrical gap, the gap having a plurality of protrusions 20 for manipulating an internal magnetic flux wherein said plurality of protrusions are each at irregular angular intervals from each other.

25. (Previously Presented) The electrical machine of claim 24, wherein the plurality of protrusions are defined by a groove in at least one of the outer surface of the rotor or the inner surface of the stator.

26. (Previously Presented) The electrical machine of claim 24, wherein the stator further comprises at least one stator pole.

27. (Previously Presented) The electrical machine of claim 24, wherein the plurality of protrusions extend axially along the length of the gap.
28. (Previously Presented) The electrical machine of claim 24, wherein the plurality of protrusions skewedly extend along the length of the gap.
29. (Currently Amended) An electric motor comprising a stator substantially housing a rotor, the rotor having an outer surface and a body, the body adapted to receive at least one magnetic element (12) and the outer surface having a plurality of notches (20) formed thereon wherein the plurality of notches are randomly distributed on the outer surface (16) of the rotor.
30. (Previously Presented) The electric motor of claim 29, wherein the rotor further comprises several layers (10) of lamination.
31. – 32. (Cancelled)
33. (Currently Amended) The electric motor of claim 29, wherein the plurality of notches (20) form[[s]] a grooves along an axial length of the rotor.
34. (Currently Amended) The electric motor of claim 33, wherein at least one of the grooves is skewed with respect to an axis of the motor.
35. (Currently Amended) An electric motor comprising a stator (38) for receiving a rotor, the stator (38) having a plurality of poles 34 stemming from the stator body toward the rotor, the rotor having an outer surface facing the plurality of poles; wherein at least two-one of said plurality of poles define[[s a]] grooves (40) at an end surface facing the outer surface of the rotor, and, wherein said grooves are each at irregular angular intervals from each other.

36. (Currently Amended) The electric motor of claim 35, wherein at least one of the groove extends axially along an axis of the stator.
37. (Currently Amended) The electric motor of claim 35, wherein at least one of the groove extend skewedly along an axis of the stator.
38. (Previously Presented) The electric motor of claim 35, wherein the grooves manipulates a magnetic flux of the rotor.